## CFDA 15.641

## Wildlife Without Borders - Mexico

## **Summary of Projects 2007**

17 Grants Total FWS Funding: \$599,542 Total Leveraged Funds: \$1,241,649

Protecting the Wintering Habitat of the Monarch Butterfly in Mexico.

In partnership with ALTERNARE A.C. The Monarch Reserve was created in 1980 without consulting peasant farmers-owners of this land. As a result, over-exploitation of forest resources, soil erosion, unsustainable agricultural practices, demand from wood-related industry, uncontrolled tourism, and lack of productive alternatives threatens this delicate habitat. Through this grant ALTERNARE will provide training in sustainable natural resource use for 250 farmers that live in the buffer areas around the reserve, create a group of 20 instructors on planning, organizing and management of community activities to improve social and environmental conditions, implement restoration projects in 7 communities, and give 55 workshops at the Monarch Reserve Training Center on reforestation, nurseries management and decision-making. In addition, ALTERNARE will develop a short & long-term self-financing business plan, to include an ecotourism component, working with the Reserve's Director and other NGOs. Amount: \$45,000. Match: \$211,070.

Wildlife Management Certificate Course for Mexican State-level Personnel along the U.S.-Mexico Border.

In partnership with Unidos para Conservacion (UPC) and the National Institute of Ecology (INE). A main threat to wildlife in Mexico is a lack of trained personnel. On-the-job training opportunities for government employees are rare, particularly at the state-level. In response, a training program was developed by INE, UPC, and universities in Mexico. Emphasis is on teamwork, conflict resolution, outreach, decision-making, monitoring, landscape ecology, and adaptive management. Requirements include course graduates to serve as instructors in other states, generating a multiplicative effect. Close to 200 wildlife managers have been certified so far, and 5 high-quality technical training manuals have been produced in Spanish (now being used in Latin America). Through this grant, the 6<sup>th</sup> certificate course will be implemented for 35 students on Mexican states along the border, and 500 training manuals will be produced. Amount: \$70,000. Match: \$145,067.

Training of Extension Workers on Sustainable Natural Resource Use in Central and Southern Mexico and Production of Training Material.

In partnership with Centro Campesino para el Desarrollo Sustentable A.C. The proponent's approach to natural resources management training is unique. Its methodology has evolved as a result of comprehensive discussions with other "campesino" organizations in the country regarding challenges, goals, and effective conservation techniques. This methodology has been used successfully in Mexico, significantly impacting land use practices throughout the country. Topics include strategic planning, adaptive management, capacity-building, communication methods, leadership, and problem-solving. Through this grant Centro Campesino will provide training for 200 peasant farmers in/or around important biodiversity areas in Oaxaca, Hidalgo,

and Tlaxcala, Mexico. The workshops will cover subjects from soil fertility to alternative production of vegetables using rain water. In addition, a core group of 20 extension workers will receive specialized training to serve as future instructors. Training material will be produced in Spanish. Amount: \$30,000. Match: \$23,460.

Environmental Education/Outreach Campaign for the Protection of Four Nature Reserves of the Baja California Peninsula.

In partnership with Pronatura Noreste-Ensenada and the National Commission for Protected Areas. Half of the Baja Peninsula is under protection, including terrestrial and marine reserves. The new Bahia Angeles y Canales de Ballenas y de Salsipuedes Reserve will connect three other surrounding reserves. Together, these ecosystems will support one of the most productive ocean/coastal areas in the world, harboring several ESA and CITES listed species such as whales, and sea turtles. These ecosystems provide energy that sustains the deserts of the peninsula and surrounding islands, habitat of listed species (desert bighorn sheep, pronghorn antelope), and a large number of migratory birds. Uncontrolled tourism-related development, including the largest marina complex in the world is threatening these resources. Through this grant, PRONATURA will involve the public in the conservation of these resources by conducting 4 workshops for children, teachers, women groups, and tourism industry representatives; developing curricula for school programs; implementing public education campaigns through the media; training 25 community leaders; producing 4 educational school kits; training students as research and guide assistants; developing outreach material for the management plans of these reserves. Amount: \$35,000. Match: \$74,701.

Second International Course for Park Guards of Mexico and Central America.

In partnership with the Instituto de Historia Natural y Ecologia (IHNE). Declaring a nature reserve does not guarantee its conservation as personnel faces a plethora of problems (logging, illegal wildlife trade, forest fires, human settlements). Confronting these challenges requires training, rarely available for park rangers (often the only institutional presence in a reserve). In 1995, this program supported the "I<sup>st</sup> Course for Park Rangers of Nature Reserves of Chiapas" to provide basic tools to enable park rangers to face these challenges, changing their image from "ecological police" to "outreach agents", establishing the Training Center of Park Rangers at INEH. By 2006, almost 200 individuals from 40 reserves from Mexico and Central America have received training, establishing partnerships with the International Federation of Park Rangers and the Association of Park Guards of Argentina. Through this grant, the 2<sup>nd</sup> International Course for Parks Guards of Mexico and Central America will be implemented; training 20 additional guards and field training materials will be produced. Amount: \$20,000. Match: \$19,808.

Monitoring Monarch Butterfly in Hibernation Areas in Mexico.

In partnership with Protected Areas Council of Mexico. Uninformed, uncontrolled tourism is threatening the forests of the Monarch Butterfly Reserve in Mexico. Critical in establishing sustainable ecotourism which would contribute to the preservation of these forests, is the development of effective management plans, including environmental education, outreach, and well-planned tourism infrastructure, as a tool for sustainable development. Essential to this is a monitoring program which involves local communities to jointly work with managers, tour operators, and NGOs to determine where ecotourism sites should be established and managed.

Through the implementation of this grant, reserve staff will: map geographic location of monarch colonies; determine their relative distribution and abundance, mortality incidents; and use this data to enhance outreach and ecotourism plans. In addition 5 workshops will train approximately 168 subsistence farmers and outreach material will be produced and distributed among local communities and visitors. Amount: \$40,000. Match: \$29,100.

Course for Mexican Journalists: Biodiversity & Society.

In partnership with Fondo para la Comunicacion y Educacion Ambiental. Enacting laws, establishing reserves, and listing species, does not guarantee the protection of wildlife if there is no public involvement. An informed, organized, engaged public is critical in promoting/enforcing legislation, managing resources, and ultimately, creating a social culture which embraces the values of nature protection. Journalistic material addressing biodiversity conservation in Mexico can be scared, superficial, sensationalist, misleading, or inaccurate. Through this project, the grantee will implement a 4-day workshop at a university in Mexico to train 20 journalists in topics on biodiversity conservation, to create a cadre of journalists in Mexico able to identify, research and cover biodiversity conservation issues adequately. Amount: \$45,000. Match: \$21,500.

Support for U.S. State Agencies to participate in the Wildlife Without Borders-Mexico Program & in the Trilateral Committee.

In partnership with Association of Fish and Wildlife Agencies. Through this project, support will be provided to U.S. state agencies (California, New Mexico, Arizona, and Texas) to conduct field evaluations of projects funded under the Wildlife Without Borders-Mexico Program, as well as participate in the annual meeting of the Canada/Mexico/U.S. Trilateral Committee for Wildlife and Ecosystem Conservation and Management, to take place in Quebec, Canada on May 14-18, 2007. Amount: \$12,000.

Community Nature Reserves in the Sierra Tarahumara.

In partnership with Sierra Madre Alliance. A new approach to conservation is providing key lessons on local participation in nature reserve management in Mexico. Indigenous people are managing their lands as "Peasant Reserves", based on their cultural/economic needs. Through this grant, the proponent will develop: a model for planning/certification of community nature reserve designation based on traditional natural resource use and plant/wildlife protection and restoration; 6 indigenous proposals including core protected areas, protection of endangered species and priority areas restoration; local proposals to protect wildlife habitat and watersheds; 2 community proposals to Mexican authorities for certification as Peasant Reserves; plans for watershed and riparian restoration; train 15 local leaders in bio-cultural nature reserve planning wildlife and native plants conservation; 3 workshops on forest management and conservation; and produce bilingual manuals/video. Amount: \$40,000. Match: \$168,500.

Graduate Course on Environmental Education in Baja California.

In partnership with San Diego Natural History Museum. The globally important natural resources of Baja California are highly threatened by uncontrolled development. Master's degree programs in environmental education (EE) were eliminated for lack of resources. Long-lasting conservation in this region requires linking existing EE classroom learning with actual project implementation by training teachers in the fundamentals of Conservation Biology. Through this grant, the proponent will: design/implement a 180hr certificate course based on Quantum Learning and PROBEA's curricula (an EE program develop by the proponent); train 4 instructors to replicate the course in the region; produce training material; partner with a Mexican academic institution (CETYS University) to grant credit for the course, implement a pilot course for 25-30 teachers, and develop and implement conservation programs in the schools of the participant teachers. Amount: \$45,000. Match: \$67,915.

## Training for a Sustainable Future in Mexico.

In partnership with Grupo Ecologico Sierra Gorda. The Sierra Gorda Biosphere Reserve in Mexico is the richest in the country in terms of ecosystem diversity and the 2nd richest in biodiversity, and an internationally recognized UNDP pilot program in regional development, and a model of how to reconcile environmental and socio-economic priorities. Threats include extensive livestock ranching, inefficient agriculture, wildfires, inadequate forest management practices, and poaching. Through this grant the Grupo Ecologico Sierra Gorda will conduct a certificate course on environmental education (57 trainees); a workshop on reserve management (24 trainees); a leadership course (44 trainees), a workshop on biodiversity offsets (30 resource managers); a program on environmental/social return on investment (36 resource managers); two environmental awareness workshops (92 community leaders, eco-tourism guides, eco-club members and young); and one workshop on measuring carbon inventories (30 university professors and students, public and government staff). Amount: \$45,000. Match: \$80,014.

Research and Strategy Implementation for the Conservation of Mexican Migratory and Endangered Bats.

In partnership with Wildlife Trust. Bats perform critical ecological functions such as seed dispersal, plant pollination, and pest control. However, bat populations are declining at alarming rates. To protect the endangered long-nosed bat, Baja California's fishing bat, banana bat, and flat-headed Myotis, this grant will: monitor and survey bat migration along migratory corridors; study their ecology and conservation needs; monitor and survey populations in key caves; implement environmental education programs in 12 states in Mexico; produce educational material. Amount: \$20,000. Match: \$20,000.

Training on Ecological Restoration for Peasant Farmers in Guerrero. Phase IV: Outreach and Training.

In partnership with Grupo Estudios Ambientales. Much of the world's biodiversity occurs on lands of peasant farmers/indigenous people. In Mexico, these are key partners because over 15 million hectares of tropical and temperate forest (approximately 70% of the forested land area) are collectively owned by these groups. Therefore, it is essential to establish partnerships with them to successfully manage natural resources at the landscape level. Through this grant, the proponent will provide training in sustainable natural resources management and restoration to 5 local communities (150 participants), implement 15 habitat restoration projects in these

communities, produce/implement an environmental education and outreach campaign for local schools, and produce a peasant training manual on sustainable natural resources techniques. Amount: \$45,000. Match: \$57,190.

Jaguar Conservation in Community Protected Areas in Chinantla, Oaxaca.

In partnership with Geoconservacion, A.C. The Chinantla communities own one of the largest intact cloud forest masses in Mesoamerica. Occupying only 1% of Mexico's territory cloud forest, it harbors over 10% of biodiversity. These communities have declared 20,000 hectares of contiguous forest as "Community Protected Areas", recognized by Mexican authorities. Through this grant, the proponent will open a center for research/training and "scientific tourism", including a summer field course for 15 master's students from Mexico and the US, train local leaders as research and tour guides, conduct participatory research on jaguar ecology and human conflict, train local communities in protected area management, produce educational/outreach and training materials, and work with Mexican private industry on payment for environmental services. . Amount: \$50,000. Match: \$46,299.

Training Community Guardians for Jaguar Protection in Priority Areas of Western Mexico.

In partnership with HOJANAY. The purpose of this project is to protect remaining jaguar habitat in the western coast of Mexico. Once extending from the Grand Canyon to South America, remaining jaguar habitat in North America is restricted to a narrow belt of forests around Mexico's coasts. Based on a highly successful tiger conservation model used in Indonesia and Cambodia, the proponent will implement an intensive "boot-camp" training course for 220 local volunteer "Jaguar Rangers" which belong to 12 municipalities adjacent to 2 protected areas and establish 4 monitoring points. Working with wildlife enforcement and management authorities, these volunteers will be trained to act as a front-line defense against poachers and loggers, as well as to increase perception of local communities as stewards of these forests. Amount: \$9,750. Match: \$3,770.

Restoration of the California Condor to Baja California, Mexico.

In partnership with Zoological Society of San Diego. Once numbering in the thousands, the California condor was found from British Columbia to Baja California, Mexico. By the 1980s the species reached near extinction. The goal of this project is to implement a program to restore the species to the San Pedro Martir Mountains in northern Baja California, and eventually link them to the central California reintroduced populations, by reintroducing 4-8 condors/year, until anticipated carrying capacity of 20 pairs. Through this grant, the proponent will: implement a binational educational/outreach campaign; build housing to support field-staff; monitor released birds using radiotelemetry/satellite GPS; train Mexican biologists and students; and conduct behavioral research on reintroduction candidates and established populations. Amount: \$40,000. Match: \$211,433.

Training and Equipment for the Network for the Protection of Whales Caught in Fishing Nets of Bahia de Banderas, Nayarit-Jalisco-2007.

In partnership with Instituto Tecnologico Bahia Banderas. According to NOAA's estimates, 48-65% of whales photographed in U.S. coasts show evidence of wounds related to fishing nets. A group of 21 volunteers from research, academic, and scientific organizations in Nayarit and Jalisco created a network to monitor and rescue whales reported caught in fishing nests. Through this grant, the proponent will obtain equipment to rescue and recover trapped whales, obtain supplies to treat injured whales, provide training to members on rescue/treatment techniques, create a Database of incidents for the use of management authorities, and produce educational material for distribution among government institutions, eco-tourism operators, private business and communities. Amount: \$7,792. Match: \$61,822.